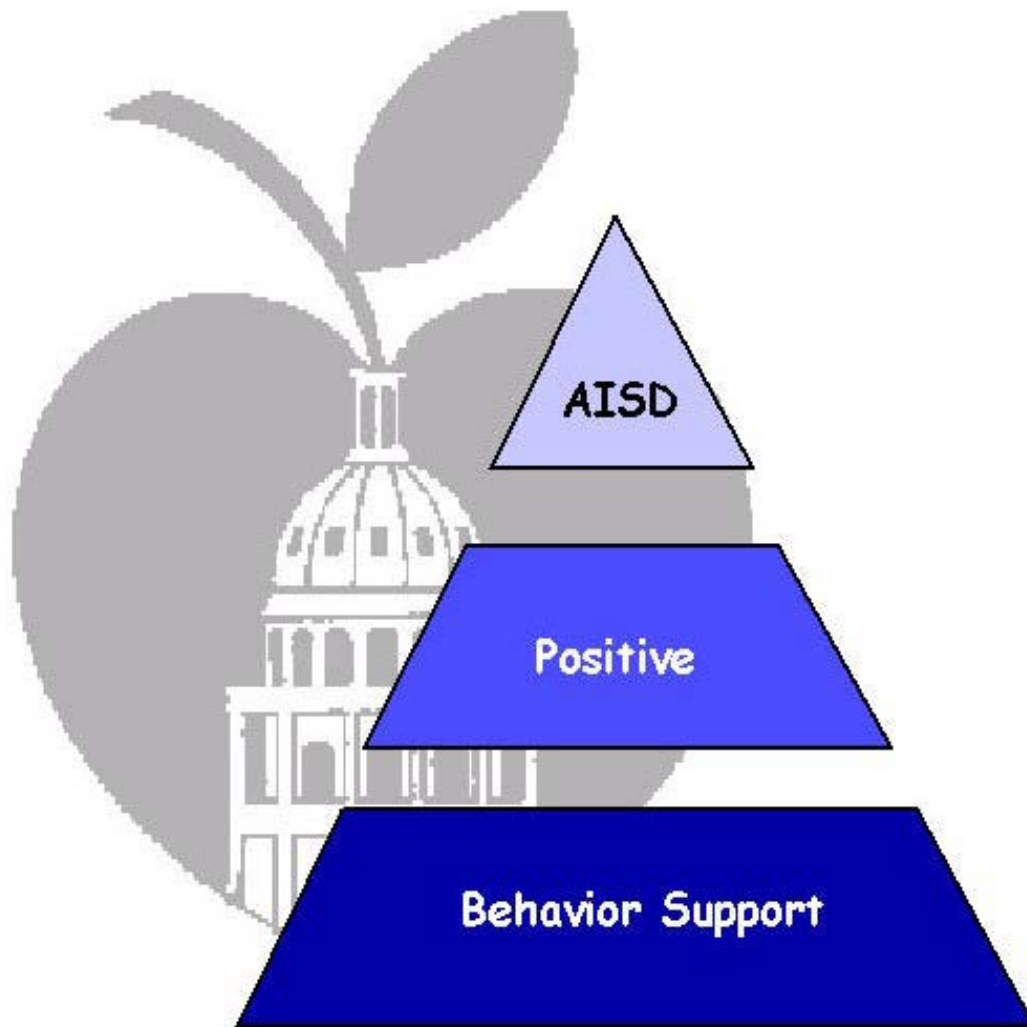# POSITIVE BEHAVIOR SUPPORT EVALUATION, 2009–2010

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EXECUTIVE SUMMARY

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Positive Behavior Support (PBS) is a systems approach to the prevention of problem behavior and the improvement of student academic performance and has been implemented in the Austin Independent School District (AISD) since 2003–2004. In 2009–2010, PBS was implemented on 80 AISD campuses with support from the AISD PBS team. Through PBS, campuses develop a continuum of systemic and individualized strategies delivered within school-wide, classroom, and individual student systems. PBS specialists support campus implementation and deliver embedded professional development as campus staff use data to identify needs, design interventions, and monitor improvement. This report summarizes PBS implementation at AISD during 2009–2010 and examines the relationships between PBS implementation and school climate, student attendance, discipline, and recovered instructional time.

FINDINGS

PBS IMPLEMENTATION

Implementation at most PBS campuses did not reach or sustain the levels that were needed to produce improvement in student outcomes.

➢ In Spring 2010, PBS was implemented at 77 of 111 AISD regular elementary, middle, and high schools as well as at three alternative campuses.

➢ Implementation levels varied from the *planning/training* to *advanced* stages; most frequently, campuses were in the *beginning* stage.

CAMPUS CLIMATE

PBS was related to high student ratings of school fairness and rewards for positive behavior and work but also to poor student ratings of campus safety. Poorer ratings of safety by students and behavior management by teachers at PBS campuses compared to non-PBS campuses may reflect the higher levels of behavior problems that motivate campuses to participate in PBS.

➢ Elementary and secondary students at PBS campuses, on average, rated their schools as being more fair and their teachers as giving more praise or rewards for good behavior and for good work than did students at non-PBS campuses. However, they also reported feeling less safe at their school than did students at non-PBS campuses.

➢ Teachers at PBS elementary and secondary campuses were less satisfied with how their campus addressed student behavior, classroom management, and common area management than were teachers at non-PBS campuses.

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ATTENDANCE

Results did not warrant conclusions about an impact of PBS on attendance rates.

➢ No relationship was found between the level of PBS implementation in 2009–2010 and attendance at middle or high schools.

➢ At elementary schools, the level of PBS implementation and attendance were negatively related.

DISCIPLINE

No relationship was found between PBS implementation and discipline at elementary schools. At secondary schools, the level of PBS classroom system implementation in 2009–2010 was positively related to the following changes between 2008–2009 and 2009–2010:

➢ a decrease in discipline referral rates

➢ a decrease in the percentage of students with five or more referrals

➢ a decrease in discretionary suspension or removal rates

RECOVERED INSTRUCTIONAL TIME

PBS contributed to gains in instructional days at secondary schools.

➢ Students at PBS middle schools and high schools gained instructional days through decreased suspensions and disciplinary alternative education program (DAEP) removals.

➢ However, this gain occurred at non-PBS campuses as well, so the amount of gain that can be attributed to the PBS program is uncertain.

DISCIPLINE DISPROPORTIONALITY

Results for PBS were mixed and difficult to interpret because of confounding factors.

➢ Categorical analyses indicate that in 2009–2010, the relative risk for discretionary suspension or removal was slightly higher for African American students at non-PBS campuses than for African American students at PBS campuses.

➢ However, relative risk increased between 2008–2009 and 2009–2010 at a greater rate for African American students at PBS campuses than for African American students at non-PBS campuses.

DISCUSSION

Due to the planned discontinuation of the district PBS program in 2011–2012, specific recommendations for PBS program improvement are not included in the present report. However, lessons based on report findings may be applicable to future district initiatives that incorporate elements similar to components of PBS.

1. Only a small number of PBS campuses ever advanced to the intermediate stage of implementation. It may be critical to identify both the areas of needed program improvement and the obstacles to program implementation in continuous and timely ways in order to facilitate uninterrupted improvement.

2. Classroom implementation was more strongly related to improved student outcomes than was implementation in the other three PBS systems. Teacher access to classroom system supports may be key to changing the learning environment because it has a direct impact on student outcomes.

3. Systematic differences between campuses that do and campuses that do not participate in voluntary district initiatives, as well as variation in the needs and goals of campuses that do participate, are challenges for assessments of fidelity and for providing relevant guidance regarding improving implementation and outcomes.

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OVERVIEW OF POSITIVE BEHAVIOR SUPPORT

Positive Behavior Support (PBS) is a systems approach to the prevention of problem behavior and the improvement of student academic performance. PBS develops a positive and predictable school culture (Sugai et al., 2000) based on a problem-solving model with three levels of intervention that vary in scope and intensity. PBS was first piloted by Austin Independent School District (AISD) at three middle schools during 2003–2004. Each year since, the number of campuses implementing PBS has increased. In 2009–2010, PBS was implemented on 80 AISD campuses with support from the AISD PBS team.

The AISD PBS program builds a collaborative structure within schools through the campus team system. Student behavior support is nested within the school-wide, classroom, and individual student systems. Within each student behavior support system, PBS provides a continuum of systemic and individualized strategies based on students' demonstrated level of need. PBS specialists deliver embedded professional development as campus staff identify needs, design intervention strategies, and use data to monitor improvement.

PROGRAM FUNDING

Until 2007, the AISD PBS program was funded primarily by (a) Title IV, a federal grant for programs targeting violence and drug prevention; (b) Title I, a federal grant providing resources to school districts to boost the academic achievement of low-achieving students; and (c) local funds. Beginning in 2007–2008, AISD funded a 15-member district team, a PBS coordinator, and an evaluator, primarily through a Safe Schools/Healthy Students grant and local funds. In 2009–2010, administration of PBS was strengthened by adding a technical assistance facilitator. Table 1 presents 2009–2010 funding sources and the number of positions they each support.

Table 1. 2009–2010 Positive Behavior Support Expenditures, by Funding Source

Funding source	Funding amount	Number of full-time equivalent positions
Title I	$152,751	2.3
Title IV	$103,410	1.5
ACCESS*	$584,677	8.0
Local	$384,952	6.0
Total	**$1,225,790**	**17.8**

Source. AISD Title IV, Title V, ACCESS program records, and AISD records of financial expenditures (IFAS), Department of Program Evaluation
Note. Budget figures include staff positions, professional development activities, and supplies.
*Austin Community Collaboration to Enhance Student Success is an initiative funded by a Safe Schools/Healthy Students grant.

LEVEL OF INTERVENTION AND SERVICE DELIVERY SYSTEMS

PBS teams analyze student behavior, design interventions, and deliver services within three social-environmental contexts (i.e., school-wide, classroom, and individual student PBS systems). Interventions are delivered at one of three levels. Universal interventions are geared toward all students throughout the school (e.g., clearly stated behavioral expectations; active teaching; and rewarding of appropriate social skills, planned adult supervision, and consistent consequences for problem behavior). Targeted interventions focus on identifying and intervening when students need additional support (e.g., training teachers about how to respond to negative behavior and aligning classroom expectations with campus guidelines for success). Intensive interventions address the needs of students who have even greater behavioral challenges. These interventions are based on individual student observations and include classroom management support for teachers, behavior support plans for individual students, and referrals to external services providers (Figure 1).

Figure 1. The AISD Positive Behavior Support Model: Intervention Strategies by Levels of Intervention

Intensive
(for 2-5% of the population)

- Referral procedures to request student support services
- Classroom management support for teachers
- Behavior support plans for individual students

Targeted
(for 10-15% of the population)

- Response protocol and teaching interactions
- Clearly defined classroom management structures
- Referral to district and community targeted services

Universal
(for 80-85% of the population)

- Established school-wide expectations that are taught
- Activity expectations in classroom settings
- Referral to district and community prevention and early intervention services

Source. AISD Positive Behavior Support program records, Department of Learning Support Services

AISD PBS Specialists

In 2009–2010, the AISD PBS program organized PBS specialists into zone teams of three specialists, one in each of the PBS systems. This change facilitated campus access to expert skills and strengthened vertical alignment of service delivery. It also allowed the AISD PBS team to form focus groups, consisting of five coaches at each level of intervention to insure horizontal alignment. Each zone team works at about 15 schools, grouped within a common geographical area.

PBS specialists work at campuses to train administrators, staff, students, and parents about PBS practices. The PBS specialists teach staff members to access AISD data and to systematically observe student and staff behavior. They regularly conduct observations as they build campus PBS capacity. PBS specialists also respond to requests for help with students whose needs are intensive and require individualized strategies and behavior support plans. With PBS specialist support, the PBS campus team coordinates teacher problem-solving teams, teacher training, and student referrals to on- and off-campus services. All campus staff members establish behavior expectations and reinforcement processes and learn to use data to select and monitor interventions.

Campus Team

PBS activities on the campuses are coordinated by campus PBS teams, consisting of a campus administrator, representative staff members, and the lead PBS specialist. The campus teams meet regularly to review campus data and coordinate PBS implementation and training. At each campus, one team member is assigned the role of internal coach. Internal coaches attend district training sessions and are responsible for coordinating campus PBS team meetings and updates. Another PBS campus team member acts as a liaison with the campus IMPACT team. PBS specialists work with the campus teams to use behavior data to set priorities and evaluate the effectiveness of interventions. Campus team members also learn to conduct systematic behavioral observations, using tools developed by the AISD district-level PBS team. Campus PBS teams, as well as other campus staff members and administrators, may request additional services from their PBS specialist, in addition to regular PBS implementation support (Appendix A).

CAMPUS IMPLEMENTATION

Campus participation in the AISD PBS program begins with campus-wide presentations and discussion facilitated by a PBS specialist. Campus staff members vote on campus PBS participation. If at least 80% of staff agree to participate in PBS, a memorandum of understanding is signed by the PBS coordinator and the campus principal. Although most campuses that begin PBS implementation continue to participate in the program, occasionally campuses with memorandums of understanding have periods of PBS inactivity (e.g., because of changes in campus administration).

CAMPUS PARTICIPATION IN THE DISTRICT PBS PROGRAM

During the 2009–2010 school year, 80 campuses actively participated in the AISD PBS program. For this evaluation study, campuses were defined as active participants for school years with spring implementation data. The 2009–2010 PBS campuses included 54 elementary schools; 17 middle schools; six high schools; and three special campuses (Lucy Read Pre-Kindergarten Demonstration School, Ann Richards School, and The Alternative Learning Center). [1] Of the 80 active campuses in 2009–2010, 56 were continuing from 2008–

> *Every year it gets better, having uniform rules and regulations in classroom to classroom and common areas.*
>
> Elementary school teacher
> AISD (2010) teacher Interviews

2009. Four PBS campuses that participated in the AISD PBS program in 2008–2009 did not continue in 2009–2010. Table 2 presents counts of campuses, by PBS status and level. A complete listing of AISD campuses and their PBS status for 2009–2010 is included in Appendix B.

Table 2. AISD Campuses, by Positive Behavior Support Status, 2009–2010

School level	Number of campuses	
	PBS	Non-PBS*
Elementary	54	25
Middle	17	1
High	6	9
Alternative schools	3	7
Total	**80**	**42**

Source. AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation

*Includes four campuses active in the district PBS program in 2008–2009, but inactive in 2009–2010: Allison Elementary, Paredes Middle School, Crockett High School, and Travis High School. See Appendix B for a list of campuses, by PBS status.

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[1] The AISD alternative schools served by PBS (Lucy Read Pre-Kindergarten Demonstration School, Ann Richards School for Young Women Leaders, and The Alternative Learning Center) were not included in the outcome analyses that follow because they differed from traditional schools with respect to organization and student population.

CAMPUS PBS IMPLEMENTATION

PBS implementation was assessed using the AISD Benchmark Tool (Benchmark) that captured ratings of implementation levels for the PBS campus team and each service delivery system: school-wide, classroom, and individual student. The Benchmark consisted of 30 items rated on a 5-point scale: 0 for *no action*, 1 for *planning/training,* 2 for *beginning,* 3 for *intermediate*, and 4 for *advanced*. (See Appendix C for a listing of Benchmark items.) The Benchmark was completed for each PBS campus three times during the year by the PBS specialists, in collaboration with the campus PBS team. Average Spring 2010 Benchmark scores spanned nearly the full range of the scale (.53 to 3.95), with an average score of 2.16. Benchmark averages for elementary, middle, and high schools were 2.23, 2.18, and 1.52, respectively. Table 3 through Table 6 report average system scale scores for each implementation period.

The team system scale consisted of 11 Benchmark items that assessed the degree to which the campus team represented stakeholders, used data to plan, shared information, and coordinated PBS activities on the campus. Table 3 presents average team system scale scores for the three implementation periods during 2009–2010. Throughout the year, the average team system scores stayed between the *beginning* and *intermediate* stages. On average, team system improvement was greatest at high schools, as compared with elementary and middle schools.

Table 3. Average Positive Behavior Support Team System Scores, by Implementation Period

| School level | Number of campuses | Implementation period | | | Change in average scores between period 1 and period 3 |
		1: August–December	2: January–March	3: April–June	
Elementary	53	2.74	2.75	2.54	-.20
Middle	14	2.63	2.79	2.67	+.04
High	3	2.48	2.20	2.80	+.32

Source. AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation
Note. Only the 70 campuses for which the Benchmark was available for all three implementation periods were included. Campus teams rated implementation items on a 5-point scale, ranging from 0 for *no action* to 4 for *advanced*.

The school-wide system scale consisted of eight Benchmark items that assessed the degree to which PBS structures, attention signals, acknowledgements of expected behaviors, and data-based decision making were implemented. The items also assessed the training of school staff on school-wide and common area observations. Table 4 presents averages of the eight school-wide system items during the three implementation periods. From the beginning to the end of 2009–2010, school-wide implementation improved for elementary and middle schools and stayed constant for high schools. Middle schools, on average, began the year in the *planning/training* stage and ended the year in the *beginning* stage. Elementary schools showed improvement within the *beginning* stage.

Table 4. Average Positive Behavior Support School-wide System
Scores, by Implementation Period

School level	Number of campuses	Implementation period			Change in average scores between period 1 and period 3
		1: August– December	2: January– March	3: April– June	
Elementary	53	2.14	2.35	2.30	+.16
Middle	14	1.96	2.10	2.14	+.18
High	3	2.17	2.00	2.17	0

Source. AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation
Note. Only the 70 campuses for which the Benchmark was available for all three implementation periods were included. Campus teams rated implementation items on a 5-point scale, ranging from 0 for *no action* to 4 for *advanced*.

The classroom system scale consisted of six Benchmark items. The items assessed the degree to which behavior expectations were used in classrooms, classroom management supported PBS implementation, classroom system training needs were identified and addressed, school staff members were trained to conduct classroom observations, and data-based decision making for classroom interventions was used. Table 5 presents average classroom system scale scores for the three implementation periods. All school levels showed improvement over the year in implementation of the classroom system. Average scores for all levels were in the *planning/training* stage at the beginning of the year and in the *beginning* stage at the end of the school year. This pattern of improvement is consistent with the goals of the AISD PBS team for 2009–2010, which focused on classroom implementation.

> *[PBS} helped organize the discipline in the classroom. It was more proactive so it taught me to look at it from a different perspective. Instead of waiting to react to misbehavior, planning ahead of time. Instead of thinking of it as punishment, think of something that would help stop the behavior.*
>
> Elementary school teacher
> AISD (2010) teacher Interviews

Table 5. Average Positive Behavior Support Classroom System Scores, by Implementation Period

School level	Number of campuses	Implementation period			Change in average scores between period 1 and period 3
		1: August– December	2: January– March	3: April– June	
Elementary	53	1.97	2.08	2.19	+.22
Middle	14	1.86	2.00	2.10	+.24
High	3	1.83	1.60	2.00	+.17

Source. AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation
Note. Only the 70 campuses for which the Benchmark was available for all three implementation periods were included. Campus teams rated implementation items on a 5-point scale, ranging from 0 for *no action* to 4 for *advanced*.

The individual student system scale consisted of five Benchmark items that assessed the degree to which campus staff used data to identify and evaluate individual intervention strategies, as well as the degree of data sharing and coordination with on- and off-campus resources for students with intensive needs. This scale also assessed whether the PBS campus team trained staff to implement the individual student system. Table 6 presents average individual student system scale scores for the three implementation periods.

Table 6. Average Positive Behavior Support Individual Student
System Scores, by Implementation Period

		Implementation period			
School level	Number of campuses	1: August–December	2: January–March	3: April–May	Change in average scores between period 1 and period 3
Elementary	53	1.61	1.95	1.77	+.16
Middle	14	1.71	1.81	1.94	+.23
High	3	1.73	.53	.87	-.87

Source. AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation
Note. Only the 70 campuses for which the Benchmark was available for all three implementation periods were included. Campus teams rated implementation items on a 5-point scale, ranging from 0 for *no action* to 4 for *advanced*.

Throughout the year, and at all levels, average Benchmark scores for the individual system stayed below the *beginning* stage, although improvement did take place at elementary and middle schools. During 2009–2010, the individual student system was not a focus of implementation for the AISD PBS program. A few campus PBS teams did, however, set campus PBS goals for the individual student system. The following section describes campus PBS goals and their relationship to implementation in the four PBS systems.

CAMPUS IMPLEMENTATION GOALS

In 2009–2010, the AISD PBS team initiated a goal-setting process with campuses. PBS specialists used campus discipline data to guide campus decisions about how to focus implementation efforts during the year. Of the 77 elementary, middle, and high schools with spring Benchmark data, 74 campuses identified at least one PBS system as an implementation goal for 2009–2010 (Table 7). Although some campuses set more than one implementation goal, 55% of the campuses that set goals set only one goal, and analyses examined the primary goal of campuses. Most frequently, the primary PBS goal was focused on the school-wide system (*n* = 31, 40%). Next in frequency, implementation goals focused on the classroom system (*n* = 24, 33.8%). Only three campuses set primary goals focused on the PBS individual student system (3.9%).

At elementary school campuses, the PBS systems most frequently targeted with an implementation goal were the classroom system (40.7%) and the school-wide system (38.9%). At middle school campuses, the PBS systems most frequently targeted with an implementation goal

were the school-wide system (47.1%) and the classroom system (35.3%). Only three high school campuses set implementation goals. The goals of two campuses focused on the classroom system and the goal of one campus focused on the school-wide system.

Table 7. Positive Behavior Support System Goals at Campuses, for 2009–2010

PBS system goal	Elementary schools	Middle schools	High schools	Totals
Team system	6	2		8
School-wide system	21	8	1	32
Classroom system*	22	6	2	30
Student system	3			3
No goal set	2	1	3	4
Total campuses	**54**	**17**	**6**	**77**

Source. AISD Positive Behavior program records, Department of Learning Support Services
Note. Five elementary and two middle schools had goals in both the school-wide and classroom systems.

The relationship between the implementation goals of campuses and their implementation progress was examined with paired-samples *t*-tests comparing period 1 and period 3 Benchmark scores. The seven campuses with a goal related to both school-wide and classroom systems were included in the classroom system group because the school-wide system was the starting point of PBS implementation for all campuses. Only campuses with Benchmark data for both implementation period 1 and period 3 were included in the analyses (*n* = 69). Campuses with classroom PBS goals (*n* = 29) showed significant improvement in their classroom and student systems during the year (Table 8).

Table 8. Change in Average Positive Behavior Support System
Implementation, by Campus Implementation Goal

PBS system goal	Number of campuses	PBS system implementation level					
		School-wide		Classroom		Student	
		Period 1	Period 3	Period 1	Period 3	Period 1	Period 3
Classroom	29	2.20	2.45	2.05	2.43	1.81	2.21
School wide	29	2.16	2.22	1.87	2.10	1.64	1.50
Team	8	1.38	1.55	1.48	1.35	1.00	.93
Student	3	2.04	2.23	2.06	2.13	1.80	2.40

Source. AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation; AISD Positive Behavior Support program records, Department of Learning Support Services
Note. Only Positive Behavior Support campuses that had Benchmark scores for period 1 and period 3 and that set an implementation goal were included.

Campuses with classroom implementation goals (*n* = 29) started and ended the year with relatively high team system scores (2.79 for both period 1 and period 3) and showed significant improvement in classroom and individual student PBS systems. Figure 2 shows period 1 and

period 3 Benchmark scores in each system for campuses that focused on the PBS classroom system.

Figure 2. Change in Implementation for Campuses With a Focus on the Positive Behavior Support Classroom System
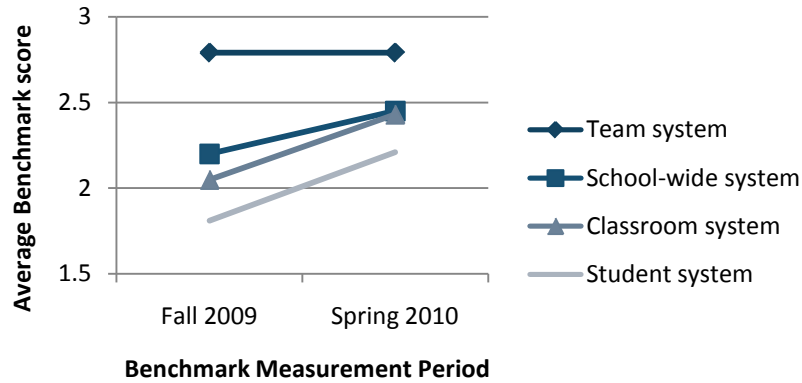
Campuses that focused on the school-wide system (*n* = 29) showed a different pattern of implementation over time (Figure 3). Team system Benchmark scores declined over the year (Figure 3). Classroom system scores improved. School-wide and student systems showed little change.

Figure 3. Change in Implementation for Campuses With a Focus on the Positive Behavior Support School-wide System
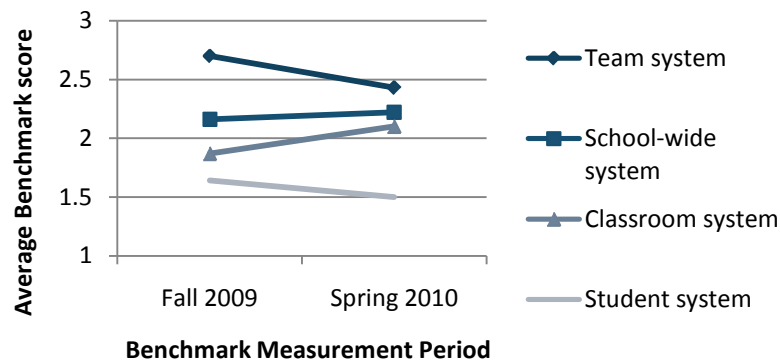
Comparisons of implementation change between campuses that focused on the classroom system and those that focused on the school-wide system suggest that classroom implementation efforts can lead to improved implementation across all PBS systems.

STUDENT OUTCOMES

Through data-driven decisions by campus learning communities, PBS changes the environment in order to change student behavior and improve student outcomes. Campus staff and the PBS specialists work together to define, teach, and positively reinforce a defined set of child and adult behaviors that promote learning. Coached by the PBS specialists, the campus PBS team develops structures to enable all staff members to use data to anticipate where and when negative student behavior is likely to occur. Through these interventions, PBS is expected to affect school climate, rates of discipline referrals, and rates of student suspensions, among other outcomes. Over time, an improved behavior environment supports improved academic outcomes.

With 59 campuses in their second continuous year of PBS during 2009–2010, the focus of the student outcome evaluation was on changes by school level in perceived school climate; attendance rates; discipline referrals; discretionary suspensions or removals (i.e., the subset of discipline referrals with a disposition of a discretionary suspension or removal); and the gap in suspension and removal rates between African American and non-African American students. Level analyses were conducted for elementary schools and secondary schools (middle and high schools) and data presented by level represent averages of campuses within levels. Data from the three alternative campuses were not included in the outcome analyses because they differed from traditional schools with respect to organization and student population.

STUDENTS' PERCEPTIONS OF SCHOOL CLIMATE

The entire range of PBS interventions, from universal to intensive levels, is expected to affect school climate by establishing a culture that is respectful, predictable, and focused on learning. Student perceptions of the climate at their school were assessed through an AISD district-wide survey administered by classroom teachers. In the spring semester of 2009–2010, 87% of elementary school students, 72% of middle school students, and 55% of high school students in Grades 3 through 11 completed climate surveys.

The Student Climate Survey consisted of 39 questions asking students about their experiences with peers and campus staff, as well as their perceptions of the school environment. Students rated each item on a scale ranging from 1 (*never*) to 4 (*always*). The effect of PBS was examined using the 11 questions most directly related to the PBS program. Students' responses for each item were averaged for each school and average student ratings at PBS schools were compared with average student ratings at non-PBS schools. Analyses were conducted separately for elementary and secondary schools. Average school ratings of PBS climate items for elementary and secondary schools are presented in Tables 9 and 10, respectively.

Table 9. Average Student Ratings of School Climate at Positive
Behavior Support (PBS) and Non-PBS Elementary Campuses

Survey item	Non-PBS campuses	PBS campuses	Effect size
6. Adults at this school treat all students fairly.	3.89	3.92 ↑	Small
10. The school rules are fair.	3.67	3.75 ↑	Medium
11. The consequences of breaking the school rules are fair.	3.95	4.05 ↑	Medium
12. My teachers always make sure that students follow the rules.	3.89	3.93 ↑	Small
14. Students at my school follow the rules.	3.16	3.02 ↓	Medium
15. I feel safe at my school.	3.73	3.64 ↓	Medium
16. I feel safe on the school property.	3.76	3.69 ↓	Medium
17. Teachers give rewards or praise for good behavior.	3.44	3.59 ↑	Medium
28. Teachers give rewards or praise for good work	3.42	3.57 ↑	Medium
36. My teachers are fair to everyone.	3.79	3.85 ↑	Small
37. All my teachers use the same rules.	3.81	3.97 ↑	Medium

Source. AISD Student Climate Survey 2009–2010, Department of Program Evaluation; AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation
Note. Significant differences between PBS and non-PBS campuses are indicated by an arrow, based on a meaningful effect size, as measured by Cohen's *d*. For differences labeled as small, Cohen's $d \geq .20$; for differences labeled as medium, Cohen's $d \geq .50$; for differences labeled as large, Cohen's $d \geq .80$.

Elementary students at PBS campuses, on average, rated their schools as being fairer and their teachers as giving more praise or rewards for good behavior and for good work, compared with ratings by elementary students at non-PBS campuses. Although items assessing school rules, consequences, fairness, and praise were rated more positively by students at PBS campuses, items assessing student perceptions of safety at their school or on school property were rated less positively by students at PBS campuses, compared with ratings students at non-PBS campuses.

Table 10. Average Student Ratings of School Climate at Positive
Behavior Support (PBS) and Non-PBS Secondary Campuses

Survey item	Non-PBS campuses	PBS campuses	Effect size
6. Adults at this school treat all students fairly.	3.42	3.54 ↑	Medium
10. The school rules are fair.	3.29	3.20↓	Medium
11. The consequences of breaking the school rules are fair.	3.65	3.72 ↑	Medium
12. My teachers always make sure that students follow the rules.	3.51	3.65 ↑	Large
14. Students at my school follow the rules.	3.08	2.89 ↓	Large
15. I feel safe at my school.	3.58	3.46 ↓	Medium
16. I feel safe on the school property.	3.53	3.50	None
17. Teachers give rewards or praise for good behavior.	3.06	3.11	None
28. Teachers give rewards or praise for good work	3.09	3.20 ↑	Medium
36. My teachers are fair to everyone.	3.54	3.58 ↑	Small
37. All my teachers use the same rules.	3.29	3.55 ↑	Large

Source. AISD Student Climate Survey 2009–2010, Department of Program Evaluation; AISD Positive Behavior
Support Benchmark Tool, Department of Program Evaluation
Note. Significant differences between PBS and non-PBS campuses are indicated by an arrow, based on a
meaningful effect size, as measured by Cohen's *d*. For differences labeled as small, Cohen's $d \geq$ .20; for differences
labeled as medium, Cohen's $d \geq$ .50; for differences labeled as large, Cohen's $d \geq$ .80.

Secondary students at PBS campuses, on average, rated their schools as being more fair
(except for school rules) and their teachers as giving more praise or rewards for good behavior
and for good work, compared with ratings by students at non PBS secondary campuses.
Secondary students at PBS campuses also reported feeling less safe at their schools, compared
with reports by secondary students at non-PBS campuses.

The pattern of responses among secondary schools was similar to that of elementary
schools, but with some differences worth noting. Students at secondary PBS campuses were less
likely than students at non-PBS secondary campuses to feel that school rules were fair. A second
difference was that the effect of PBS status was stronger at secondary campuses than at
elementary campuses for two items: *Teachers always make sure that students follow the rules*
and *All my teachers use the same rules*. A third difference between elementary and secondary
campuses was that while PBS status had a medium effect at elementary schools regarding reports
that teachers gave rewards or praise for good behavior, no observable effect was found for this
item at secondary schools.

The finding that students at PBS campuses felt less safe than did students at non-PBS
campuses is not surprising. PBS campuses historically tended to have more student behavior
problems than did non-PBS campuses because poor student behavior is a primary reason for
administrator interest in PBS (Basu, La Turner, & Christian, 2009).

TEACHERS' PERCEPTIONS OF SCHOOL CLIMATE

AISD teachers were asked about campus climate in Fall 2009. Because of the timing of the survey, the teachers' responses can inform us about the context of PBS implementation in the first half of the 2009–2010 school year and help in interpreting student climate survey results. The AISD Staff Climate Survey asked respondents to rate their satisfaction with the way their campus addressed student behavior, classroom management, and common area management, using a 4-point scale (*very dissatisfied, not satisfied, somewhat satisfied,* and *very satisfied*). Teachers' responses were averaged for each school, and average teacher ratings at PBS schools were compared with average teacher ratings at non-PBS schools.

Table 11. Average Teacher Ratings of School Climate at Positive
Behavior Support (PBS) and Non-PBS Elementary Campuses

57. How satisfied are you with the way your campus addresses:	Non-PBS campuses	PBS campuses	Effect size
a. Student behavior	3.30	2.92 ↓	Large
b. Classroom management	3.49	3.16 ↓	Large
c. Common area management	3.35	3.15 ↓	Medium

Source. AISD Staff Climate Survey 2009-2010, Department of Program Evaluation; AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation
Note. Significant differences between PBS and non-PBS campuses are indicated by an arrow, based on a meaningful effect size, as measured by Cohen's *d*. For differences labeled as small, Cohen's $d \geq .20$; for differences labeled as medium, Cohen's $d \geq .50$; for differences labeled as large, Cohen's $d \geq .80$.

PBS elementary campuses had teachers who were less satisfied with how their campus addressed student behavior, classroom management, and common area management than did non-PBS elementary campuses (Table 11). The difference between PBS and non-PBS campuses was smallest for ratings of common area management. At the secondary level, similarly, teachers at PBS campuses were less satisfied than were teachers at non-PBS schools with how their campus addressed student behavior. The gap between PBS and non-PBS campuses at the secondary level was largest for ratings of common area management (Table 12).

Table 12. Average Teacher Ratings of School Climate at Positive Behavior
Support (PBS) and Non-PBS Secondary Campuses

57. How satisfied are you with the way your campus addresses:	Non-PBS campuses	PBS campuses	Effect size
a. Student behavior	2.86	2.51 ↓	Medium
b. Classroom management	3.07	2.82 ↓	Medium
c. Common area management	3.00	2.70 ↓	Large

Source. AISD Staff Climate Survey 2009-2010, Department of Program Evaluation; AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation
Note. Significant differences between PBS and non-PBS campuses are indicated by an arrow, based on a meaningful effect size, as measured by Cohen's *d*. For differences labeled as small, Cohen's $d \geq .20$; for differences labeled as medium, Cohen's $d \geq .50$; for differences labeled as large, Cohen's $d \geq .80$.

In summary, average ratings were lower for teachers at PBS campuses than for teachers at non-PBS campuses, regarding perceptions of how their campus addressed student behavior; this finding was consistent with lower ratings by students at PBS campuses than by students at non-PBS campuses regarding the degree to which other students followed the rules. However, students at PBS campuses were more likely than students at non-PBS campuses to agree that teachers *always make sure that students follow the rules*.

Considering that PBS implementation at the end of 2009–2010 was, on average, just beyond the beginning level, teacher dissatisfaction with how their campus addressed students' behavior in the fall and low student ratings of school safety in the spring at PBS schools may reflect the needs that propel campuses to adopt PBS. Students' reports of more frequent teacher praise or rewards and more frequent, consistent, and fair application of rules may reflect campus responses to these needs and the results of beginning the stages of PBS implementation.

STUDENT ATTENDANCE

PBS is expected to improve students' attendance rates through consistent reinforcement of behavior expectations as well as improvements in students' perceptions of campus climate and safety. Average attendance rates at PBS and non-PBS campuses in 2009–2010 were examined at each school level (Table 13). Attendance rates for students were computed by dividing the total number of days present by the number of days enrolled for each student. Campus rates were calculated by averaging the attendance rates for students who attended each campus. Among elementary schools, attendance rates at PBS and non-PBS campuses were similar. Among high schools, attendance at PBS campuses was lower, on average, than at non-PBS campuses. Attendance rates for middle schools were not compared because only one middle school did not participate in the AISD PBS program in 2009–2010.

Table 13. Average Campus Attendance Rates 2009–2010, by
Positive Behavior Support Status and Level

School level	Non-PBS campuses		PBS campuses	
	Average	Number of campuses	Average	Number of campuses
Elementary	95.91%	24	95.36%	54
High	87.86%	9	87.04%	6

Source. AISD student attendance records (WENRATTD 2008 and WENRATTD 2009); AISD
Positive Behavior Support Benchmark Tool, Department of Program Evaluation

To understand changes over time at PBS campuses, the effect of the level of PBS implementation on changes in campus attendance rates between 2008–2009 and 2009–2010 was examined by school level. For these analyses, middle and high schools were kept as separate categories, rather than combining them as secondary schools, because attendance rates dropped

at the high school level, and combining middle and high schools would confound the effects of level and PBS implementation. The effect of the level of PBS implementation on changes in attendance rates between 2008–2009 and 2009–2010 was examined with partial correlations. No relationship was found at middle or high schools. At elementary schools, level of PBS implementation and changes in attendance rates were negatively related (i.e., the better the PBS implementation, the greater the decrease in attendance rates from 2008–2009 to 2009–2010; $p \leq .01$). To better understand this unexpected finding, further exploration is needed. Identification of campus factors and how they may be related to either PBS implementation or attendance rates, or both, could support program improvement.

DISCIPLINE REFERRAL RATES

PBS aims to reduce discipline incidents both by preventing student behavior problems and by supporting the use of effective interventions when behavior problems first arise. The relationship between PBS implementation and student behavior was examined using school records of disciplinary incidents. This included all referrals for any type of discipline incident, ranging from minor incidents (e.g., dress code violations) to more serious incidents (e.g., physical aggression). The relationship between PBS implementation and changes in discipline referral rates was examined with partial correlations using 2008–2009 discipline referral rates as a control variable. Better PBS implementation was marginally related to reduced discipline referral rates at secondary schools only ($p \leq .10$). Follow-up analyses used linear regression to look at the effects of each of the four PBS systems on discipline referral rates. Controlling for implementation in the other three PBS systems as well as 2008–2009 referral rates, only the PBS classroom system was related to change in discipline referrals at secondary school PBS campuses ($p \leq .10$).

To further explore differences in referral rates by classroom implementation, PBS campuses, regardless of school level, were divided into quartile groups, based on PBS classroom implementation. Comparisons were made between campuses in the highest quartile of classroom implementation ($n = 17$) and campuses in the lowest quartile of classroom system implementation ($n = 18$). The average discipline referral rate at low classroom implementation campuses *increased* from .69 to .88 referrals per enrolled student. The change in rate represents an increase of 19 referrals per 100 students. The average discipline referral rate at high classroom implementation campuses *decreased* from .58 to .52 referrals. The change represents a decrease of 6 discipline referrals per 100 students. The discipline referral rate at low classroom system implementation campuses increased by 28%, while the rates of high classroom implementation campuses decreased by 10% (Figure 4). In addition to differences in the direction and amount of change in discipline referral rates, low and high classroom implementation campuses also differed in their baseline 2008–2009 discipline rates: campuses with low PBS classroom system

implementation in 2009–2010 had higher discipline referral rates in 2008–2009 than did campuses with high PBS classroom system implementation rates in 2009–2010.

Figure 4. Discipline Referral Rates at High and Low Classroom System Implementation Campuses
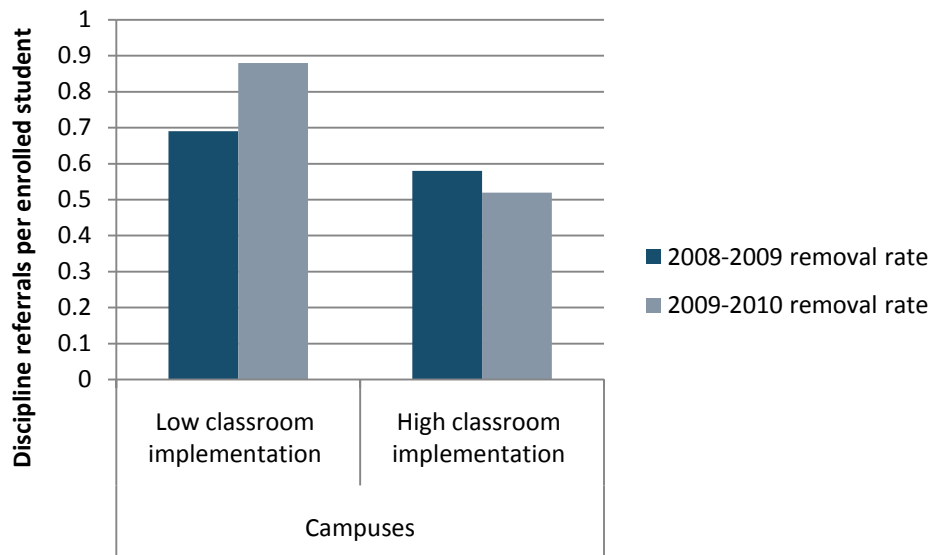
Source. AISD student records (ADIS); AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation
Note. The low classroom implementation group had 18 campuses, and the high classroom implementation group had 17 campuses.

Comparisons of campus characteristics revealed that a higher percentage of campuses with high 2009–2010 classroom implementation than of campuses with low 2009-2010 classroom implementation participated in PBS during 2008–2009 (88% and 56%, respectively). In addition, a higher percentage of campuses in the high classroom implementation group than of campuses in the low classroom implementation group were elementary schools (82% and 50%, respectively).

PERCENTAGE OF STUDENTS WITH DISCIPLINE REFERRALS

The relationship between PBS implementation and the percentage of students with five or more discipline referrals was examined with partial correlations, using the percentage of students with five or more discipline referrals in 2008–2009 as a control variable. PBS implementation was marginally related to the percentage of students with five or more referrals, for secondary students only ($p \leq .10$). The higher the Benchmark scores at the end of 2009–2010, the lower the percentage of students with five or more referrals.

Follow-up analyses used linear regression to look at the effects of implementation of each of the four PBS systems on the percentage of secondary students with five or more referrals. Of the four PBS systems, only classroom implementation, when controlling for implementation in

the other three PBS systems as well as 2008–2009 percentages, was related to a lower percentage of students with five or more referrals at secondary schools ($p \leq .10$).

The findings for the percentage of students with five or more referral were similar to those reported for discipline referral rates, except that the relationship was weaker. A reduction in the number of discipline referrals overall may be a shorter term outcome for PBS than a reduction in the percentage of students with five or more referrals. In both cases, effects were stronger for classroom system implementation than for any of the other three PBS systems or for implementation overall.

DISCRETIONARY REMOVAL RATES

PBS is expected to lower rates of suspensions and removals on campuses by improving student behavior, thus reducing the student discipline incidents that lead to suspensions and removals. PBS effects are considered likely to depend upon the level of PBS implementation and to occur over a longer time period than does change in office referrals (Basu et al., 2009). In the following descriptions, the term *removals* is used for both suspensions and removals because both are removals of students from regular classroom settings. Only suspensions and removals assigned at the discretion of campus administrators i.e., not mandated by Texas Education Agency (TEA) were included in the analyses because reductions in discretionary suspensions and removals were expected to be observed during earlier stages of PBS implementation than were reductions in mandatory suspensions and removal.

Discretionary removal rates were calculated by selecting discipline referrals that resulted in full-day home suspension, in-school suspension, suspension at the Alternative Center for Elementary Students, and removals to a disciplinary alternative education program (DAEP), excluding removals that are mandatory as defined by Texas Education Agency. For each campus, the total number of removals was divided by student enrollment. The resulting variable (i.e., campus discretionary removal rate) represents the number of discretionary removals per enrolled student.

> *I was like, whoa, yeah, that really works you know, 'I like the way so-and-so is sitting, I like the way so-and-so is lining up' and then the rest of them just fall into place. So if I can remember to keep doing that it would definitely be helpful.*
>
> Elementary school teacher
> AISD (2010) teacher Interviews

The relationship between PBS implementation and discretionary removal rates was examined with partial correlations, using campus discretionary removal rates for 2008–2009 as a control variable. The analyses were done separately for elementary and secondary schools and also for both levels combined. No significant relationship was found between campus PBS

implementation (as measured by average Benchmark scores) and 2009–2010 discretionary removal rates.

Follow-up analyses used linear regression to look at the effects of implementation of each of the four PBS systems on discretionary removal rates. Controlling for 2008–2009 discretionary removal rates and the other three PBS systems, better classroom implementation was related to lower discretionary removal rates. When the analyses were done by level, the effect was found for secondary schools only. To investigate further, discretionary removal rates at campuses with high classroom implementation were compared with rates at campuses with low classroom implementation (Figure 5).

Figure 5. Discretionary Suspension or Removal Rates at High and Low Positive Behavior Support Classroom System Implementation Campuses
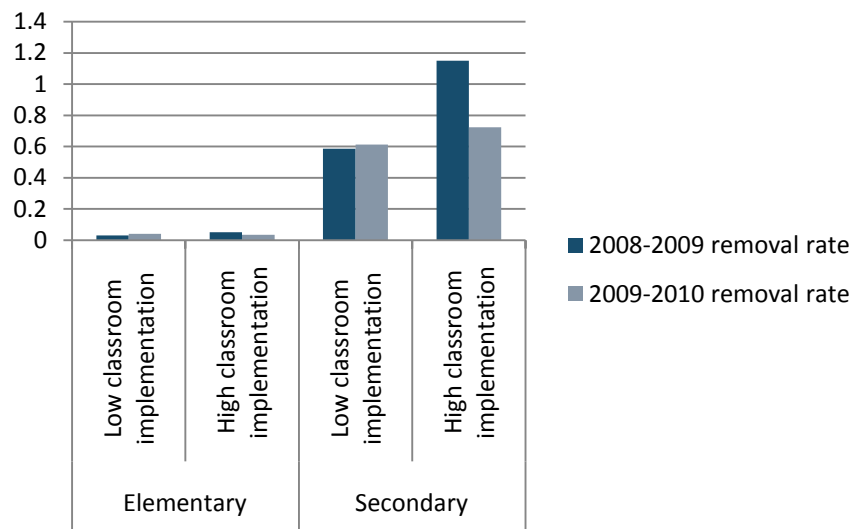
PBS campuses were divided into quartile groups, based upon PBS classroom implementation. Comparisons were made between campuses in the highest quartile of classroom system implementation and campuses in the lowest quartile of classroom system implementation (*n* = 17 and *n* = 18, respectively). As discussed in the previous section on referral rate outcomes, the high classroom implementation group had a higher percentage of elementary schools campuses that participated in the AISD PBS program in 2008–2009 than did the low classroom implementation group.

Differences between elementary school groups were small because elementary schools have few suspensions and removals of students. The average removal rate for secondary schools with low PBS classroom system implementation increased from .59 to .61 removals per enrolled

student (+3%). The change represents an increase of two removals per 100 students. The average removal rate for campuses with high classroom implementation decreased from 1.15 to .72 removals per enrolled student (-37%). The change represents a decrease of 43 removals per 100 students. In addition, campuses with high classroom implementation in 2009–2010 had higher removal rates the previous year than did campuses with low classroom implementation in 2009–2010; thus, there was more room for (and greater need of) improvement. The decrease in discretionary suspensions or removals for campuses with better classroom system implementation provides some evidence that the goal-setting process was effective for campuses that set PBS classroom system goals. The comparison of 2008–2009 removal rates for secondary schools also illustrates, as shown in Figure 5, the difficulty of isolating effects of the PBS program because campus needs are confounded with implementation levels.

In summary, results suggest that strategies implemented through the PBS classroom system may lead to decreases in discretionary suspensions and removals at secondary schools with higher than average rates of discretionary suspensions and removals.

RECOVERED INSTRUCTIONAL TIME

Through reductions in discipline incidents in common areas and classrooms, PBS can recover time for student learning and for teacher instruction. Table 14 presents changes in the rates of suspensions among students at non-PBS and PBS campuses between 2008–2009 and 2009–2010. Overall, student suspension rates dropped between 2008–2009 and 2009–2010.

Table 14. Change in Suspension Rates and Time Recovered, by Level and Positive Behavior Support Status, 2008–2009 to 2009–2010

	Elementary school students		Middle school students		High school students	
	Non-PBS	PBS	Non-PBS	PBS	Non-PBS	PBS
Change in suspension rates per 100 students*	-1.7	-1.5	-19.8	-9.2	-7.5	-17.2
Recovered time per 100 students (in days)	2.69	2.37	36.23	16.84	14.63	33.54
Difference in recovered time per 100 students (in days)		- .32		N/A*		+ 18.91

Source. AISD student records (ADIS, TEAMS); AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation

Note. Recovered time per 100 students was calculated by multiplying change in suspension rates by average days students spent out of the regular classroom (i.e., elementary school = 1.58 days, middle school average = 1.83 days, and high school average = 1.95 days).

*Because only one non-PBS middle school did not participate, changes between groups could not be compared.

The change in suspension rates for elementary students at PBS campuses was similar to that of students at non-PBS campuses. At the high school level, however, the drop in suspension rate was greater for students at PBS campuses than for students at non-PBS campuses. Change in rates between non-PBS and PBS middle school students could not be compared because only one middle school campus did not participate in PBS during 2009–2010.

At the high school level, the drop in suspensions at PBS campuses resulted in a gain of 33.54 instructional days per 100 students, 18.91 more days gained per 100 students than at non-PBS campuses. For example, a PBS high school with 1,200 students would have gained 227 more student days in the regular classroom than a comparable non-PBS high school.

Table 15 presents changes in the rates of DAEP among students at non-PBS and PBS campuses between 2008–2009 and 2009–2010. (DAEP dispositions are given only to secondary students.) Overall, DAEP rates dropped between 2008–2009 and 2009–2010. At the high school level, the drop in DAEP rate was slightly greater for students at PBS campuses than for students at non-PBS campuses. Change in rates between non-PBS and PBS middle school students could not be compared because only one middle school campus did not participate in PBS during 2009–2010.

Table 15. Change in Referral Rates to Disciplinary Campuses and
Positive Behavior Support Time Recovered

	Middle school students		High school students	
	Non-PBS	PBS	Non-PBS	PBS
Change in referral rates per 100 students	-2.1	-3.8	-1.8	-1.7
Recovered time per 100 students (in days)	66.13	119.66	63.86	60.32
Difference in recovered time per 100 students (in days)		N/A*		-3.54

Source. AISD student records (ADIS, TEAMS); AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation
Note. Recovered time per 100 students was calculated by multiplying change in suspension rates by average days students spent out of the regular classroom (middle school average = 31.49 days, and high school average = 35.48 days). Only campuses with ADIS data for 2008–2009 and 2009–2010 were included.
*Because only one non-PBS middle school did not participate, changes between groups could not be compared.

The analyses reported in Tables 14 and 15 considered the effects that changes in suspensions and DAEP removals had on regular classroom time for students. The number of days that students were out of their regular classroom represented the actual days for each disciplinary suspension and DAEP removal, as recorded by AISD school personnel. Reductions in

suspensions and removals also recover time for teachers and administrators. The New Hampshire Center for Effective Behavioral Interventions and Supports found that the cost in time of each suspension was 15 minutes for teachers and 45 minutes for administrators (as cited in Muscott, Mann, & LeBrun, 2008). To illustrate the potential impact on teacher and administrator time, these estimates were applied to the decline in the number of suspensions at PBS elementary, middle, and high schools presented in Table 14. Those decreases represent an estimated 7 hours of recovered teacher time and 21 hours of recovered campus administrator time per 100 PBS students.

It should be noted that suspension and DAEP rates dropped, and therefore time was recovered, at both PBS and non-PBS schools (Tables 14 and 15). The degree to which recovered time can be attributed to the PBS program is uncertain. PBS and non-PBS campuses varied greatly in the amount and direction of change in suspension and DAEP rates between 2008–2009 and 2009–2010. For example, at high schools, which, compared to elementary and middle schools, had the biggest difference in suspension rates between students at PBS and non-PBS campuses, changes in suspension and discretionary removal rates at the campus level ranged from 26 fewer days per 100 students to 22 more days per 100 students at non-PBS high schools and from 23 fewer to 2 more days per 100 students at PBS high schools.

DISCIPLINE DISPROPORTIONALITY

PBS is expected to both improve the behavior of all students and to increase the fairness of disciplinary actions on campuses (Utley, Kozleski, Smith, & Draper, 2002; Kaufman et al., 2010). A potential outcome of AISD PBS is to decrease the discrepancy between the percentage of African American students who are suspended or removed from class for discretionary reasons and the percentage of non-African American students who experience discretionary suspensions or removals. The relative risk (also referred to as the risk ratio) of African American students being removed or suspended for discretionary reasons is calculated by dividing the percentage of African American students with a discretionary suspension or removal by the percentage of non-African American students with a discretionary suspension or removal (Gibb & Skiba, 2008). As seen in Table 16, across AISD elementary, middle, and high school campuses, in 2009–2010, African American students were 2.53 times more likely to experience a discretionary suspension or removal than were their peers, which represented a slight increase from rates in 2008–2009. This continued a trend reported by Basu et al. (2009), who noted an increase in the relative risk for African American students from 2.25 in 2007–2008 to 2.40 in 2008–2009

Table 16. Relative Risk of Discretionary Suspensions or Removals for African American Students, Compared With Risk for Non African American Students

2009–2010 Positive Behavior Support status	Sum of students by campus*	Average 2008–2009 relative risk	Average 2009–2010 relative risk
PBS	60,683	2.33	2.49
Non-PBS	33,136	2.57	2.59
All Students	93,819	2.41	2.53

Source. AISD student records (ADIS, ASTU); AISD Positive Behavior Support Benchmark Tool, Department of Program Evaluation

Note. These data include students at regular elementary, middle, and high school campuses only.
*Because of student transfers among AISD campuses, the sums of students by campus are greater than the total number of unique students who attended schools in AISD during the school year. The effect of transfers on student counts is greater for African American students than non-African American students because the former had a higher rate of transfer than did non-African American students.

The effect of PBS implementation on relative risk for discretionary suspension or removal for African American students was analyzed categorically (comparing PBS and non-PBS campuses) because many campuses did not have enough African American students for relative risk to serve as a meaningful estimate of campus disproportionality. For example, if a campus had only three African American students, one suspension could make the difference between a high or low disproportionality score.

The categorical analyses indicate that, in 2009–2010, the relative risk for discretionary suspension or removal was slightly higher for African American students at non-PBS campuses than for African American students at PBS campuses. However, relative risk increased between 2008–2009 and 2009–2010 at a greater rate for African American students at PBS campuses than for African American students at non-PBS campuses. Conclusions about the effect of PBS on disproportionality cannot be drawn because confounding factors were not controlled for in the comparisons among schools. For example, school level was confounded with PBS status at the middle school level, and the racial distribution of students was confounded with PBS status because a higher percentage of African American students were enrolled at PBS campuses than at non-PBS campuses.

STATUS OF RECOMMENDATIONS FROM 2008–2009 REPORT

The 2008–2009 evaluation recommended that the program increase the training available for campus staff. According to the PBS coordinator, during 2009–2010, training sessions for all three PBS levels were increased, using feedback from training surveys to guide content. Five training modules and manuals were developed on PBS systems and other topics and offered through E-campus sessions. Need-based training sessions also were conducted for individual campuses, based on analysis of campus data indicators. Training sessions were conducted regarding the PBS toolkit interventions (e.g., Active Supervision, CAPTURE training for individual student interventions, and Scaffolding Classroom Management Skills). The program also instituted its first annual PBS training conference, held at Region 13 in Fall 2010, with breakout sessions presenting PBS training modules. The program coordinator noted that the restructuring of coach organization into zone teams enhanced the program's training capacity.

The 2008–2009 evaluation suggested that the PBS implementation model for high schools be reviewed. In response, the program adjusted the format for training and professional development activities at high schools, and more small-group training sessions were offered at various times during the day. PBS specialists worked closely with staff, using embedded professional development strategies. The coaching services request process provided customized support to staff, based on classroom observations and individual consultations.

As recommended in the 2008–2009 evaluation report, the program continued to support the campus readiness process, and remained mindful of the conclusion in the 2008–2009 report that campus readiness and administrative support were critical for PBS implementation.

SUMMARY AND DISCUSSION

SUMMARY OF FINDINGS

PBS IMPLEMENTATION

Although a relationship was found between PBS classroom system implementation and student discipline referrals, implementation at most PBS campuses did not reach or sustain the levels at which student outcomes were expected to be detected.

- During 2009–2010, PBS was implemented with support from the district PBS team at 54 elementary schools, 17 middle schools, six high schools, and three alternative campuses.
- Average implementation in Spring 2010 was between the *beginning* and *intermediate* stages at elementary and middle schools, and between the *planning/training* and *beginning* stages at high schools.
- Campuses with PBS classroom system implementation goals during 2009–2010 started and ended the year with relatively high team system implementation and showed significant improvement in implementation of both PBS classroom and individual student systems.

CAMPUS CLIMATE

PBS was related to high student ratings of school fairness and rewards for positive behavior and work, but also to poor student ratings of campus safety. Poorer ratings of safety by students and behavior management by teachers at PBS campuses compared to non-PBS campuses may reflect the higher levels of behavior problems that motivate campuses to participate in PBS.

- Elementary students at PBS campuses, on average, rated their schools as being more fair and their teachers as giving more praise or rewards for good behavior and for good work than did elementary students at non-PBS campuses. However, these same students also reported feeling less safe at their schools or on school property than did their peers at non-PBS elementary campuses.
- Secondary students at PBS campuses, on average, rated their schools as being more fair (except for school rules) and their teachers as giving more praise or rewards for good behavior and for good work than did secondary students at non-PBS campuses. These students, similar to those at elementary schools, also reported feeling less safe at their schools than did their peers at non-PBS campuses.
- On the district staff climate survey, teachers at PBS elementary and secondary campuses were less satisfied with how their campus addressed student behavior, classroom management, and common area management than were teachers at non-PBS campuses.

ATTENDANCE

Results did not warrant conclusions about an impact of PBS on attendance rates.
- No relationship was found between the level of PBS implementation in 2009–2010 and the change in attendance rates between 2008–2009 and 2009–2010 at middle or high schools.
- At elementary schools, the level of PBS implementation and the change in attendance rates were negatively related (i.e., the better the PBS implementation, the greater the decrease in attendance rates from 2008–2009 to 2009–2010). To better understand this unexpected finding, further exploration is needed. Identification of campus factors and how they may be related to either PBS implementation or attendance rates, or both, could support program improvement.

DISCIPLINE

No relationship was found between PBS implementation and discipline at elementary schools. At secondary schools, the level of PBS classroom system implementation in 2009–2010 was positively related to improvements in discipline.
- Better PBS classroom system implementation was related to a decrease in discipline referral rates between 2008–2009 and 2009–2010 at secondary schools only.
- Better PBS classroom system implementation was related to a decrease in the percentage of students with five or more referrals between 2008–2009 and 2009–2010 at secondary schools only.
- Better PBS classroom system implementation was related to a decrease in discretionary suspension or removal rates between 2008–2009 and 2009–2010 at secondary schools. On average, secondary schools with high PBS classroom implementation decreased discretionary suspension or removal rates from the previous year by 37%, compared with a 3% increase in rates at secondary schools with low classroom implementation.

RECOVERED INSTRUCTIONAL TIME

PBS contributed to gains in instructional days at secondary schools.
- PBS middle schools gained 16.84 instructional days per 100 students through decreased suspensions and 119.66 instructional days per 100 students through decreased DAEP removals. Only one middle school did not participate in PBS, so a comparison between PBS and non-PBS campuses was not appropriate.
- PBS high schools gained 33.54 instructional days per 100 students through decreased suspensions and 60.32 instructional days per 100 students through deceased DAEP removals. Compared with non-PBS high school campuses, PBS campuses gained an additional 15.37 instructional days per 100 students due to decreases in rates of suspensions and DAEP removals.

- Due to only a very small decline in the suspension rate at elementary schools between 2008–2009 and 2009–2010, negligible increase was found in instructional time gained, and a very small disadvantage was found at PBS schools (-.32 days)
- Students at both PBS and non-PBS campuses had decreased numbers of suspensions and DAEP removals in 2009–2010, compared with number from the previous year; however, the degree to which gains in instructional time can be attributed to the PBS program is uncertain.

DISCIPLINE DISPROPORTIONALITY

Results for PBS were mixed and difficult to interpret because of confounding factors.

- Categorical analyses comparing the relative risk of a disciplinary removal for African American students with that of their peers at PBS and non-PBS campuses indicated slightly greater discipline disproportionality for African American students at non-PBS campuses than for African American students at PBS campuses. However, discipline disproportionality increased between 2008–2009 and 2009–2010 more at PBS campuses than at non-PBS campuses.
- Conclusions about the effect of PBS on discipline disproportionality could not be drawn because of confounding factors (e.g., school level and differences among campuses in the racial distribution of students).

DISCUSSION

After 5 years of steadily increasing district resources to expand the breadth and depth of PBS implementation, in Spring 2010, PBS was implemented at 77 of 111 AISD regular elementary, middle, and high schools as well as at three alternative campuses. Implementation levels varied from the *planning/training* to *advanced* stages; most frequently, campuses were in the *beginning* stage. Program reports and evaluation activities over the years suggest that PBS implementation at many campuses did not progress over time as expected. The wide variance in levels of implementation suggests that intervening factors (e.g., campus characteristics or the match between district resources and campus PBS implementation needs) played a role in the degree to which PBS was implemented. For example, non-PBS campuses and PBS campuses with low implementation levels tended to have more student behavior problems than did campuses with relatively high levels of PBS implementation. In addition, the maintenance of implementation gains likely was affected by changes in campus staff, student population, and other district initiatives and priorities. A third factor affecting the depth and persistence of PBS implementation may be the degree to which staff agree with the foundation of PBS (i.e., that changing the school environment changes student behavior). The importance of staff buy-in to implement PBS was recognized from the start, but the challenge of achieving true integration of this underlying PBS philosophy into the daily school routine may not have been fully realized or addressed.

Due to the planned discontinuation of the district PBS program in 2011–2012, specific recommendations for PBS program improvement are not included in the present report. However, report findings that may be applicable to future district initiatives that incorporate elements similar to structural components of PBS (e.g., data-based decision making by campus teams and embedded professional development activities by district specialists) are discussed.

1. PBS implementation levels remained low from year to year. Only a small number of campuses ever advanced to the intermediate stage of implementation. It may be critical to identify both areas of needed program improvement and obstacles to program implementation in continuous and timely ways. A program logic model that takes into account how implementation and outcomes are expected to unfold over time could be helpful.

2. Classroom implementation was more strongly related to improved student outcomes than was implementation in the other three PBS systems. Classroom was the system in which embedded professional development services by PBS specialists were most often delivered. Teacher access to these support services may be key to changing the learning environments because it has a direct impact on student outcomes.

3. Campuses that participate in voluntary district initiatives differ, a priori, from campuses that do not. Implementation success, as well as links between implementation and student outcomes, may be intertwined with campus characteristics related to program participation. In addition, within the group of campuses that *do* participate, needs and goals vary. Identification of core program elements, both those common to all campuses and those that vary depending upon campus needs, could help in establishing domains for the assessment of fidelity and a clearer route to improved implementation.

REFERENCES

Austin Independent School District. (2010). *District awards for teacher excellence: Teacher perceptions of district and campus support of high quality teaching*. Austin, TX: Austin Independent School District Department of Program Evaluation.

Basu, S., La Turner, J., & Christian, C. (2009). *Positive Behavior Support evaluation, 2008–2009.* (DPE Publication No. 08.70). Austin, TX: Austin Independent School District Department of Program Evaluation.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Gibb, A. C., & Skiba, R. (2008). Using data to address equity issues in special education. *Education Policy Beliefs, 6*(3). Retrieved from http://www.eric.ed.gov/PDFS/ED500606.pdf

Kaufman, J. S., Jaser, S. S., Vaughan, E. L., Reynolds, J. S., Di Donato, J., Bernard, S. N., & Hernandez-Brereton, M. (2010). Patterns in office referral data by grade, race/ethnicity, and gender. *Journal of Positive Behavior Interventions, 12,* 44–54.

Muscott, H. S., Mann, E. L., & LeBrun, M. R. (2008). Positive behavioral interventions and supports in New Hampshire. *Journal of Positive Behavior Interventions, 10,* 190–205.

New Hampshire Center for Effective Behavioral Interventions and Supports at SERESC (2005). *Survey of time recovered for learning, teaching, and leadership activities by PBIS-NH early childhood education programs and K-12 schools*. Bedford: Author.

Sugai, G., Horner, R. H., Dunlap, G., Hieneman, M., Lewis, T. J., Nelson, M., et al. (2000). Applying positive behavior support and functional behavioral assessment in schools. *Journal of Positive Behavior Interventions, 2,* 131-143.

Utley, C. A., Kozleski, E., Smith, A., & Draper, I. L. (2002). Positive behavior support: A proactive strategy for minimizing behavior problems in urban multicultural youth. *Journal of Positive Behavior Interventions, 1,* 196–207.

APPENDIX A: SAMPLE PBS COACHING REQUEST FORM

Name _____   Position _____   Date _____

School Name _____   Grade: _____

This request is for:

   School-wide   Whole class   Small group   Individual student (ID # _____)

In which environments is the inappropriate behavior occurring?

__ Classroom   Teacher Name _____   Rm# _____   Time of Day_____

__ Classroom   Teacher Name _____   Rm# _____   Time of Day_____

__ Classroom   Teacher Name _____   Rm# _____   Time of Day_____

__ Classroom   Teacher Name _____   Rm# _____   Time of Day_____

__ Classroom   Teacher Name _____   Rm# _____   Time of Day_____

__ Classroom   Teacher Name _____   Rm# _____   Time of Day_____

Briefly describe the reason for the coaching request.

_____

_____

What services or resources are already in place? (School-wide/Common Area Reward System, Cool Down Location, Defined Common Area Behavior Expectations, Counseling, CIS, mentor teacher assistance, etc.)

_____

_____

APPENDIX B: POSITIVE BEHAVIOR SUPPORT (PBS) STATUS OF AISD CAMPUSES, 2008–2009 AND 2009–2010, BY LEVEL

Elementary schools	PBS implementation measured in Spring 2009 *n* = 47	PBS implementation measured in Spring 2010 *n* = 54
Allan Elementary School	X	X
Allison Elementary School	X	
Andrews Elementary School	X	X
Baranoff Elementary School		X
Barrington Elementary School	X	X
Barton Hills Elementary School		
Becker Elementary School	X	X
Blackshear Elementary School		
Blanton Elementary School		
Blazier Elementary	X	X
Boone Elementary School		
Brentwood Elementary School	X	X
Brooke Elementary School	X	X
Brown Elementary School	X	X
Bryker Woods Elementary School		
Campbell Elementary School		X
Casey Elementary School	X	X
Casis Elementary School		
Clayton Elementary School	X	X
Cook Elementary School	X	X
Cowan Elementary School		
Cunningham Elementary School	X	X
Davis Elementary School		X
Dawson Elementary School		
Doss Elementary School		
Galindo Elementary School	X	X
Govalle Elementary School	X	X
Graham Elementary School	X	X
Gullett Elementary School	X	X

Elementary schools	PBS implementation measured in Spring 2009 *n* = 47	PBS implementation measured in Spring 2010 *n* = 54
Harris Elementary School	X	X continued→
Hart Elementary School	X	X
Highland Park Elementary School		
Hill Elementary School		
Houston Elementary School	X	X
Jordan Elementary School	X	X
Joslin Elementary School	X	X
Kiker Elementary School		
Kocurek Elementary School	X	X
Langford Elementary School	X	X
Lee Elementary School		
Linder Elementary School	X	X
Maplewood Elementary School	X	X
Mathews Elementary School		
McBee Elementary School		
Menchaca Elementary School		
Metz Elementary School	X	X
Mills Elementary School		
Norman Elementary School	X	X
Oak Hill Elementary School	X	X
Oak Springs Elementary		X
Odom Elementary School	X	X
Ortega Elementary School	X	X
Overton Elementary	X	X
Palm Elementary School	X	X
Patton Elementary School	X	X
Pease Elementary School	X	X
Pecan Springs Elementary School		X
Perez Elementary School	X	X
Pickle Elementary School	X	X
Pillow Elementary School		
Pleasant Hill Elementary School	X	X

Elementary schools	PBS implementation measured in Spring 2009 *n* = 47	PBS implementation measured in Spring 2010 *n* = 54
Reilly Elementary School	X	X continued→
Ridgetop Elementary School		
Rodriguez Elementary School	X	X
Sanchez Elementary School	X	X
Sims Elementary School	X	X
St Elmo Elementary School		
Summitt Elementary School		
Sunset Valley Elementary School		
Travis Heights Elementary School		X
Walnut Creek Elementary School	X	X
Widen Elementary School	X	X
Williams Elementary School		X
Winn Elementary School	X	X
Wooldridge Elementary School	X	X
Wooten Elementary School		
Zavala Elementary School	X	X
Zilker Elementary School		X

Middle schools	PBS active in 2008–2009 *n* = 12	PBS active in 2009–2010 *n* = 18
Bailey Middle School		X
Bedichek Middle School		X
Burnet Middle School	X	X
Covington Middle School	X	X
Dobie Middle School	X	X
Fulmore Middle School	X	X
Garcia Middle School	X	X
Gorzycki Middle School		X
Kealing Middle School	X	X
Lamar Middle School		X
Martin Middle School	X	X
Mendez Middle School	X	X

Middle schools	PBS active in 2008–2009 *n* = 12	PBS active in 2009–2010 *n* = 18
Murchison Middle School		X continued→
O. Henry Middle School		X
Paredes Middle School	X	
Pearce Middle School	X	X
Small Middle School	X	X
Webb Middle School	X	X

High schools	PBS active in 2008–2009 *n* = 3	PBS Active in 2009–2010 *n* = 6
Akins High School		
Anderson High School		
Austin High School		X
Bowie High School		
Crockett High School	X	
Eastside Memorial Global Tech High School		X
Eastside Memorial Green Tech High School		X
Garza Independence High School		
International High School		X
Johnston High School		
Lanier High School		
LASA		
LBJ High School		X
McCallum High School		
Reagan High School	X	X
Travis High School	X	

Alternative schools (not included in report analyses)	PBS active in 2008–2009 *n* = 3	PBS active in 2009–2010 *n* = 3
The Alternative Learning Center	X	X
Ann Richards School for Young Women Leaders	X	X
Read Pre-Kindergarten Elementary School	X	X

APPENDIX C: AISD CAMPUS BENCHMARK TOOL, 2009–2010

TEAM SYSTEM ITEMS

Campus team represents all appropriate stakeholders

Campus team has clearly defined roles

Campus has administrative support

Campus team schedules PBS team meetings

Team meeting minutes/agendas are developed regularly

CAPT is used as a planning tool

Campus staff are trained in accessing SASI/DEEDS

Campus team identifies, plans, and schedules training needs

Campus team shares PBS-relevant information with stakeholders

There is a plan to train staff on PBS

Campus team reviews multiple data sources to determine need for intervention

SCHOOL-WIDE SYSTEM ITEMS

School-wide structures are in place

Campus has established common attention signals

Campus establishes a system for acknowledging expected student behaviors

Campus establishes a reinforcement system for expected adult behaviors

Campus team develops lesson plans and schedule for teaching expectations, guidelines for success

External coach trains campus staff to conduct required common area observation

Campus team identifies, plans, and schedules training needs at the school-wide level

Campus PBS team uses data to determine need for school-wide intervention

CLASSROOM SYSTEM ITEMS

Guidelines for success are integrated in classroom settings

Classroom management plans are collected regularly

Classroom management structures are in place

External coach trains campus staff to conduct required multiple classroom observation

Campus team identifies, plans, and schedules training needs at the classroom level

Campus PBS team uses data to determine need for classroom intervention

INDIVIDUAL STUDENT SYSTEM ITEMS

Campus team facilitates access to on-campus student support services

CAMPUS TEAM FACILITATES ACCESS TO DISTRICT AND COMMUNITY STUDENT SUPPORT SERVICES

Campus staff conduct student behavior observations and support teachers in developing interventions for individual students

Student data and intervention strategies are shared with IMPACT and other student support service teams

Campus team identifies, plans, and schedules training needs at the student level

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